

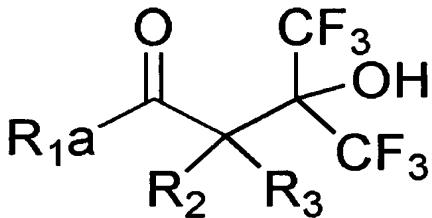
**Amendments to the Claims:**

The listing of claims will replace all prior versions, and listings, of claims in the application:

**Listing of Claims:**

1. (Original) A fluorine-containing cyclic compound represented by the following general formula (1):

[Chemical Formula 30]

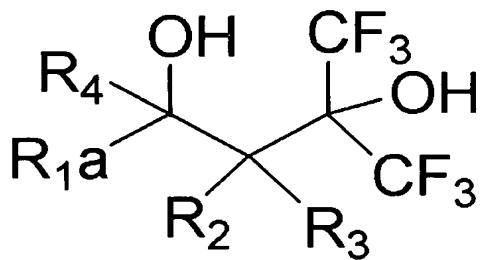


(1)

in the general formula (1), R<sub>1a</sub> is a C<sub>1</sub>-C<sub>25</sub> cyclic alkyl group, cyclic alkenyl group or cyclic alkynyl group; each of R<sub>2</sub> and R<sub>3</sub> is independently a hydrogen atom, a halogen atom, or a C<sub>1</sub>-C<sub>25</sub> straight-chain, branched or cyclic alkyl group; and each of R<sub>1a</sub>, R<sub>2</sub> and R<sub>3</sub> may contain fluorine atom, oxygen atom, sulfur atom, nitrogen atom or an atomic group containing a carbon-carbon double bond.

2. (Original) A fluorine-containing cyclic compound represented by the following general formula (2):

[Chemical Formula 31]

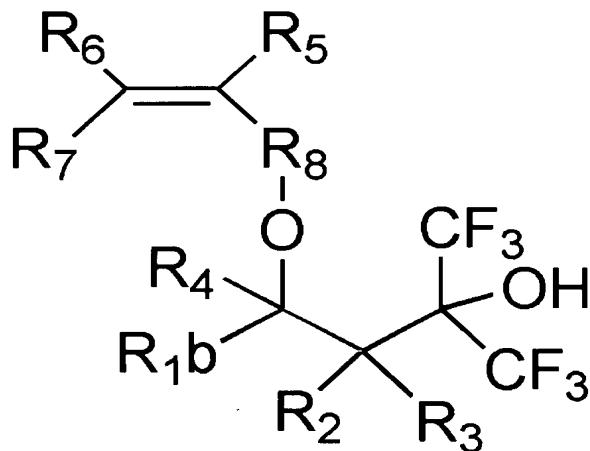


(2)

in the general formula (2), R<sub>1a</sub> is a C<sub>1</sub>-C<sub>25</sub> cyclic alkyl group, cyclic alkenyl group or cyclic alkynyl group; each of R<sub>2</sub> to R<sub>4</sub> is independently a hydrogen atom, a halogen atom, or a C<sub>1</sub>-C<sub>25</sub> straight-chain, branched or cyclic alkyl group; and each of R<sub>1a</sub> and R<sub>2</sub> to R<sub>4</sub> may contain fluorine atom, oxygen atom, sulfur atom, nitrogen atom or an atomic group containing a carbon-carbon double bond.

3. (Original) A fluorine-containing cyclic compound represented by the following general formula (3):

[Chemical Formula 32]



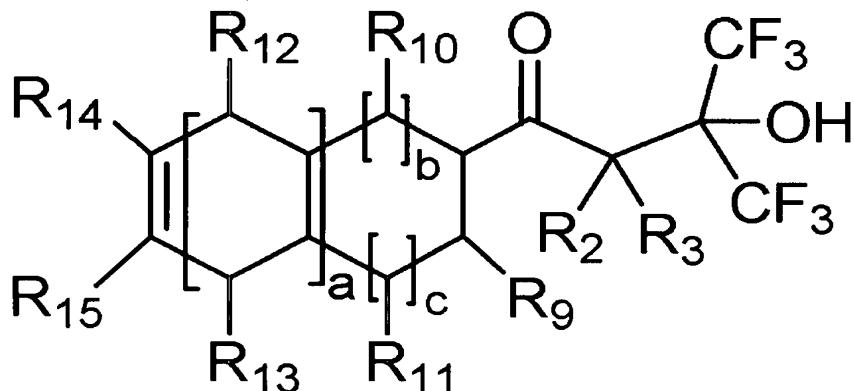
(3)

in the general formula (3), R<sub>1b</sub> is a C<sub>1</sub>-C<sub>25</sub> cyclic alkyl group, cyclic alkenyl group, cyclic alkynyl group, aryl group, or heterocyclic group, and may contain fluorine atom, oxygen atom, sulfur atom, nitrogen atom or an atomic group

containing a carbon-carbon double bond; each of R2 to R7 is independently a hydrogen atom, a halogen atom, or a C<sub>1</sub>-C<sub>25</sub> straight-chain, branched or cyclic alkyl group, and may contain fluorine atom, oxygen atom, sulfur atom, nitrogen atom or an atomic group containing a carbon-carbon double bond; and R8 is a carbonyl group or methylene group, or a single bond.

4. (Original) A fluorine-containing cyclic compound represented by the following general formula (4):

[Chemical Formula 33]

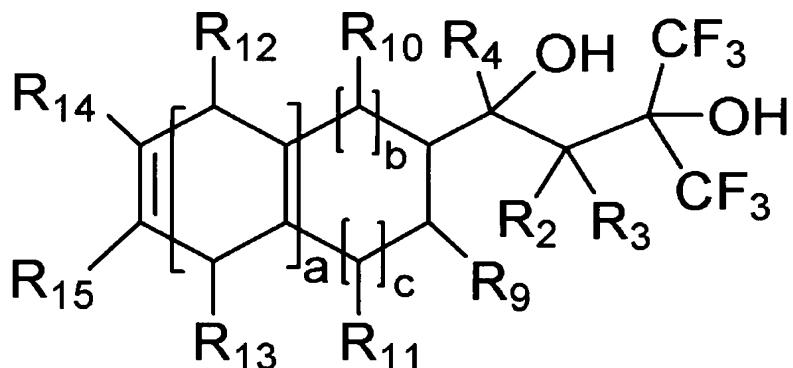


(4)

in the general formula (4), each of R2, R3 and R9 to R15 is independently a hydrogen atom, a halogen atom, or a C<sub>1</sub>-C<sub>25</sub> straight-chain, branched or cyclic alkyl group, and may contain fluorine atom, oxygen atom, sulfur atom, or nitrogen atom; R10 and R11 or R12 and R13 may be bonded together to form a ring; in such case, it is an C<sub>1</sub>-C<sub>25</sub> alkylene group that may contain oxygen, sulfur, nitrogen or hetero atom; and "a" is 0 or 1, "b" is an integer of 0-2, and "c" is an integer of 0-2.

5. (Original) A fluorine-containing cyclic compound represented by the following general formula (5):

[Chemical Formula 34]

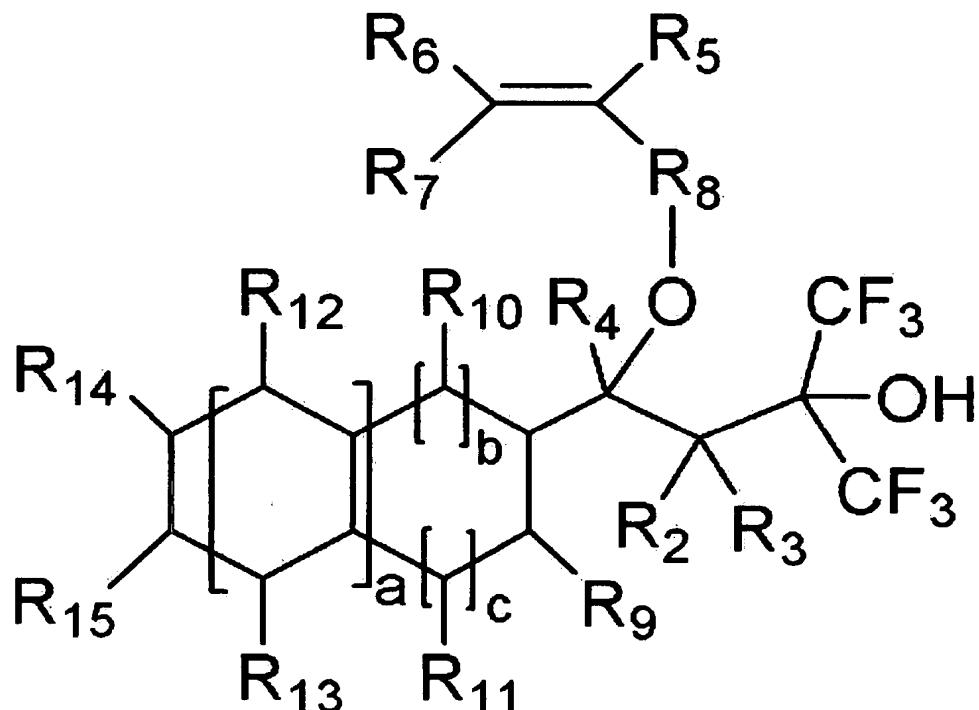


(5)

in the general formula (5), each of R2 to R4 and R9 to R15 is independently a hydrogen atom, a halogen atom, or a C<sub>1</sub>-C<sub>25</sub> straight-chain, branched or cyclic alkyl group, and may contain fluorine atom, oxygen atom, sulfur atom, or nitrogen atom; R10 and R11 or R12 and R13 may be bonded together to form a ring; in such case, it is an C<sub>1</sub>-C<sub>25</sub> alkylene group that may contain oxygen, sulfur, nitrogen or hetero atom; and "a" is 0 or 1, "b" is an integer of 0-2, and "c" is an integer of 0-2.

6. (Original) A fluorine-containing cyclic compound represented by the following general formula (6):

### [Chemical Formula 35]

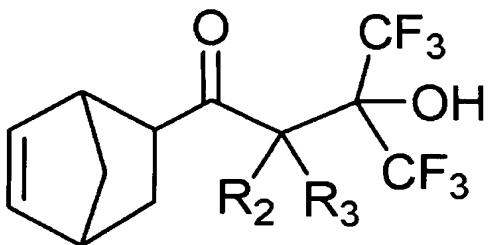


(6)

in the general formula (6), each of  $R_2$  to  $R_7$  and  $R_9$  to  $R_{15}$  is independently a hydrogen atom, a halogen atom, or a C<sub>1</sub>-C<sub>25</sub> straight-chain, branched or cyclic alkyl group, and may contain fluorine atom, oxygen atom, sulfur atom, or nitrogen atom;  $R_8$  is a carbonyl group or methylene group or a single bond;  $R_{10}$  and  $R_{11}$ ,  $R_{12}$  and  $R_{13}$ , or  $R_{14}$  and  $R_{15}$  may be bonded together to form a ring; in such case, it is an C<sub>1</sub>-C<sub>25</sub> alkylene group that may contain oxygen, sulfur, nitrogen or hetero atom; and "a" is 0 or 1, "b" is an integer of 0-2, and "c" is an integer of 0-2.

7. (Original) A fluorine-containing cyclic compound represented by the following general formula (7):

[Chemical Formula 36]

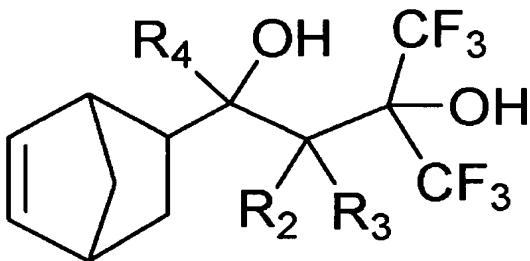


(7)

in the general formula (7), each of R<sub>2</sub> and R<sub>3</sub> is independently a hydrogen atom, a halogen atom, or a C<sub>1</sub>-C<sub>25</sub> straight-chain, branched or cyclic alkyl group, and may contain fluorine atom, oxygen atom, sulfur atom, or nitrogen atom.

8. (Original) A fluorine-containing cyclic compound represented by the following general formula (8):

[Chemical Formula 37]

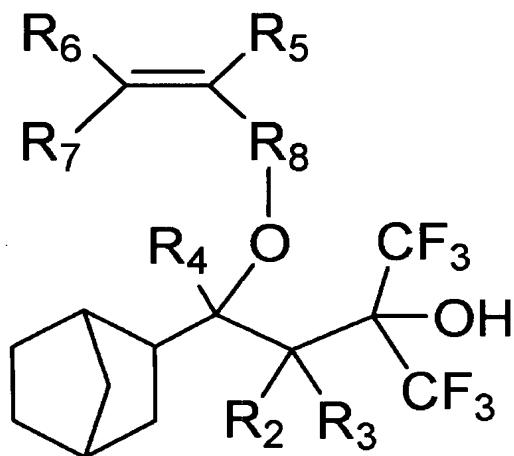


(8)

in the general formula (8), each of R<sub>2</sub> to R<sub>4</sub> is independently a hydrogen atom, a halogen atom, or a C<sub>1</sub>-C<sub>25</sub> straight-chain, branched or cyclic alkyl group, and may contain fluorine atom, oxygen atom, sulfur atom, or nitrogen atom.

9. (Original) A fluorine-containing cyclic compound represented by the following general formula (9):

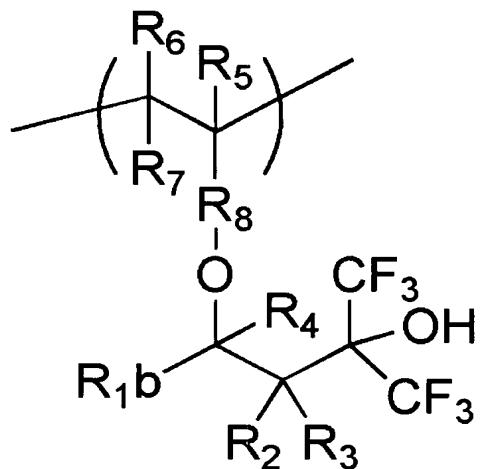
[Chemical Formula 38]



(9)

in the general formula (9), each of R2 to R7 is independently a hydrogen atom, a halogen atom, or a C<sub>1</sub>-C<sub>25</sub> straight-chain, branched or cyclic alkyl group, and may contain fluorine atom, oxygen atom, sulfur atom, or nitrogen atom; and R8 is a carbonyl group or methylene group or a single bond.

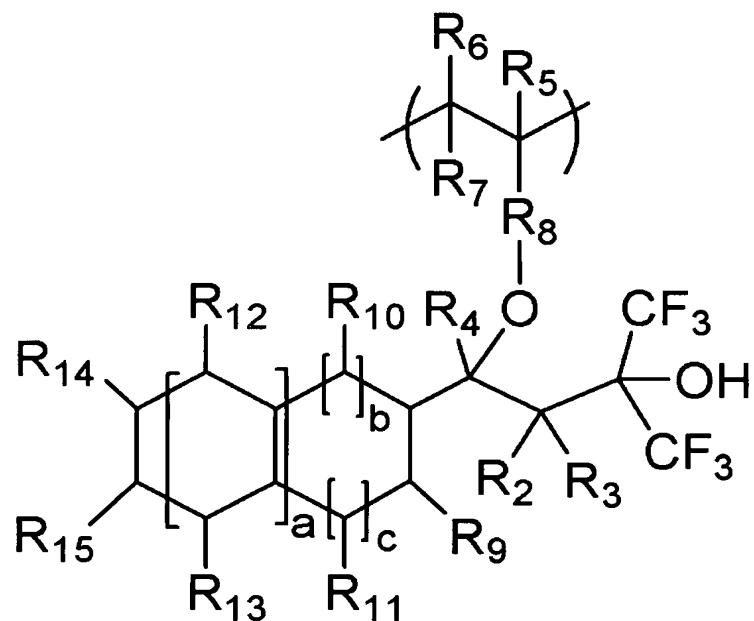
10. (Original) A fluorine-containing polymer compound having a weight average molecular weight of 1,000 to 1,000,000, which is characterized in comprising a repeating unit represented by the following general formula (10):  
[Chemical Formula 39]



(10)

in the general formula (10), R1b and R2 to R8 are defined as in claim 3.

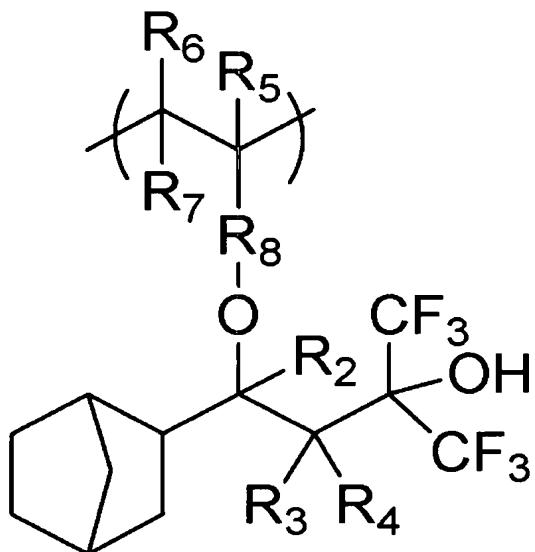
11. (Original) A fluorine-containing polymer compound having a weight average molecular weight of 1,000 to 1,000,000, which is characterized in comprising a repeating unit represented by the following general formula (11): [Chemical Formula 40]



(11)

in the general formula (11), R2 to R15 and a, b and c are defined as in claim 6.

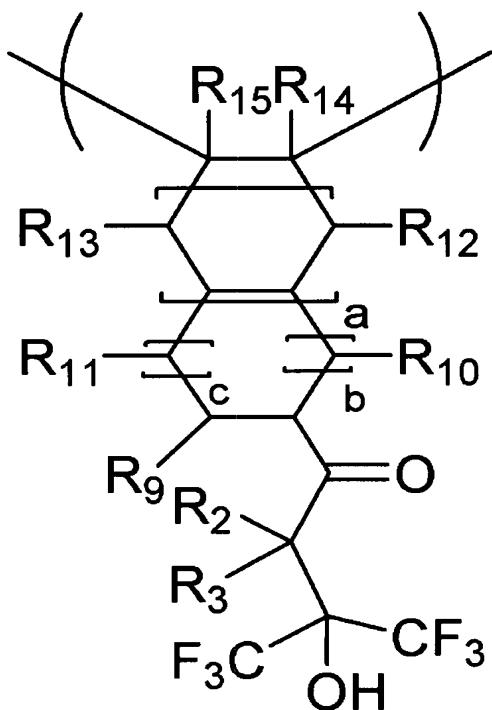
12. (Original) A fluorine-containing polymer compound having a weight average molecular weight of 1,000 to 1,000,000, which is characterized in comprising a repeating unit represented by the following general formula (12):  
[Chemical Formula 41]



(12)

in the general formula (12), R<sub>2</sub> to R<sub>8</sub> are defined as in claim 9.

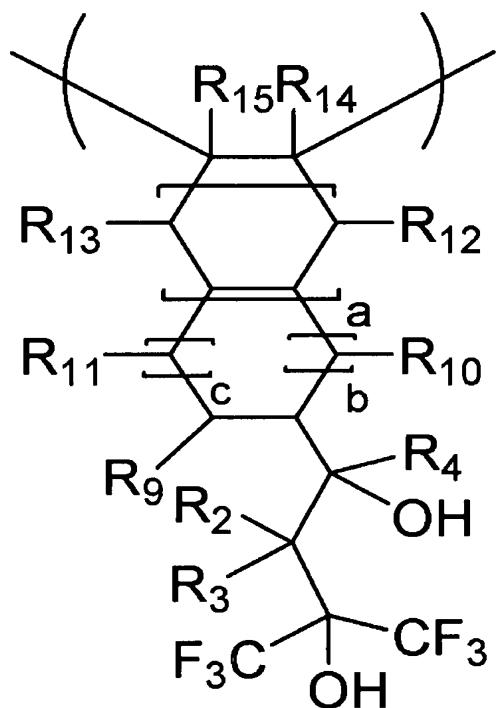
13. (Original) A fluorine-containing polymer compound having a weight average molecular weight of 1,000 to 1,000,000, which is characterized in comprising a repeating unit represented by the following general formula (13):  
[Chemical Formula 42]



(13)

in the general formula (13),  $R_2$ ,  $R_3$  and  $R_9$  to  $R_{15}$  and  $a$ ,  $b$  and  $c$  are defined as in claim 4.

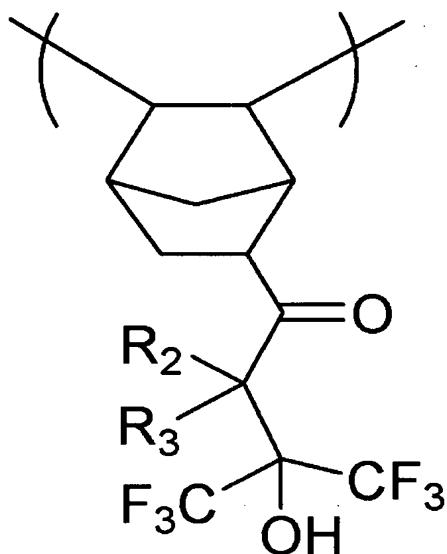
14. (Original) A fluorine-containing polymer compound having a weight average molecular weight of 1,000 to 1,000,000, which is characterized in comprising a repeating unit represented by the following general formula (14):  
[Chemical Formula 43]



(14)

in the general formula (14), R2 to R4 and R9 to R15 and a, b and c are defined as in claim 5.

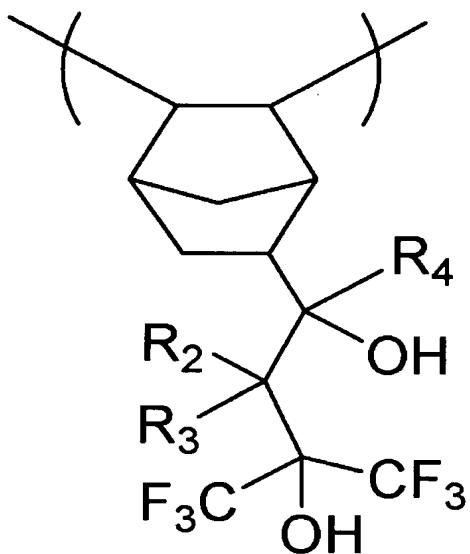
15. (Original) A fluorine-containing polymer compound having a weight average molecular weight of 1,000 to 1,000,000, which is characterized in comprising a repeating unit represented by the following general formula (15):  
[Chemical Formula 44]



(15)

in the general formula (15), R2 and R3 are defined as in claim 7.

16. (Original) A fluorine-containing polymer compound having a weight average molecular weight of 1,000 to 1,000,000, which is characterized in comprising a repeating unit represented by the following general formula (16):  
[Chemical Formula 45]

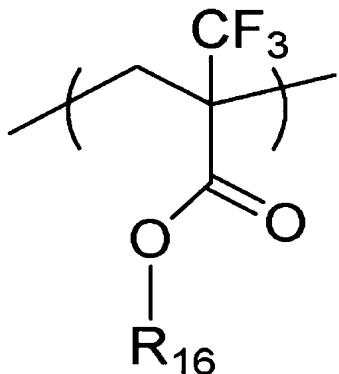


(16)

in the general formula (16),  $R_2$  to  $R_4$  are defined as in claim 8.

17. (Currently Amended) A fluorine-containing polymer compound having a weight average molecular weight of 1,000 to 1,000,000 according to ~~claims 13 to 16~~<sup>claim 13</sup>, which is characterized in ~~comprising~~<sup>comprises</sup> a repeating unit represented by the following general formula (17):

[Chemical Formula 46]



(17)

in the general formula (17), R16 is a hydrogen atom, or a C<sub>1</sub>-C<sub>25</sub> straight-chain, branched or cyclic alkyl group, and may contain fluorine atom, oxygen atom, sulfur atom, nitrogen atom, hydroxyl group or hexafluorocarbinol group.

18. (Currently Amended) A fluorine-containing polymer compound according to ~~any one of claims 10-17~~ claim 10, which is characterized in ~~comprising~~comprises a repeating unit having an acid-labile group.
19. (Currently Amended) A fluorine-containing cyclic compound or ~~fluorine containing polymer compound~~ according to ~~any one of claims 1-18~~ claim 1, which is characterized in ~~that~~wherein hydroxy groups contained in the molecule are partially or entirely protected with protecting groups.
20. (Currently Amended) A resist material characterized in comprising a fluorine-containing polymer compound according to ~~any one of claims 10-19~~ claim 10.
21. (Currently Amended) A chemically-amplified resist material characterized in comprising a resist material according to claim 20 and a photoacid generator.
22. (Currently Amended) A pattern forming process characterized in comprising ~~at least~~ the steps of:
  - (a) applying a resist material according to claim 20 or ~~21~~ to a substrate;
  - (b) subjecting the substrate to a heat treatment;
  - (c) conducting an exposure, using a high-energy ray of a wavelength of 300nm or less or an electron beam, through a photomask;

(d) subjecting the exposed resist film to a heat treatment; and  
conducting a development treatment.

23. (Original) A pattern forming process according to claim 22, wherein the high-energy ray used is F<sub>2</sub> excimer laser, ArF excimer laser, KrF excimer laser or soft X-ray.

24. (New) A fluorine-containing polymer compound according to claim 10, wherein hydroxyl groups contained in the molecule are partially or entirely protected with protecting groups.